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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,084

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Richard M Wiseman

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EXAMINER

CHEN, YAN LU

ART UNIT

PAPER NUMBER

2146

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,084

Applicant(s)

WISEMAN, RICHARD M

Examiner

Yan Chen

Art Unit

2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/7/2008, 10/11/2007, 4/14/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "the first content" in line 11, page 8. There is insufficient antecedent basis for this limitation in the claim. Additionally, line 11 recites "the second content". There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required. For examination purpose, "the first content" and "the second content" is interpreted as "the first information" and "the second information" respectively.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 6-10, 16, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Lundblad et al. Patent No.: US 6,906,755 B2 (hereinafter Lundblad).

Regarding claim 1, Lundblad teaches:

A method of synchronizing the delivery of (a) first information which is to be presented to a user via first output means of a multi-modal interface (b) second information which is to be presented to the user via second output means of the multi-modal interface, the method comprising:

i) estimating total time needed to deliver the first information (a) to the first output means or (b) to a store local to the first output means (column 1, lines 55-58);

ii) estimating total time needed to deliver the second information (a) to the second output means or (b) to a store local to the second output means (column 1, lines 58-59); and

iii) using the estimates obtained in step i) or step ii) to determine whether presentation to the user of the first or second information needs to be delayed to achieve a desired synchronism of presentation (column 1, lines 59-62); and

iv) applying any delay determined in step iii) to achieved the desired synchronism of presentation (column 1, lines 62-65).

Regarding claim 2, Lundblad teaches:

A method as claimed in claim 1, wherein the first and second output means are provided by a single output device (figure 2, element 108 – TV).

Regarding claim 3, Lundblad teaches:

A method as claimed in claim 1, wherein at least one of the first and second output means is a visual display means (figure 2, TV screen for display of video).

Regarding claim 4, Lundblad teaches:

A method as claimed in claim 1, wherein at least one of the first and second output means is an audio reproduction means (figure 1, TV speaker for audio).

Regarding claim 6, Lundblad teaches:

A method as claimed in claim 1, wherein the first means is a visual display means (figure 1, video) and the second means is an audio reproduction means (figure 1, audio).

Regarding claim 7, Lundblad teaches:

A method of synchronizing delivery of (a) first information which is to be presented to the user via a visual display of a multi-modal interface and (b) second information which is to be presented to the user over a visual or an audio interface of the multi-modal interface, the method comprising:

i) estimating total time needed to deliver the first information ~ to the visual display or (b) to a store local to the visual display (column 1, lines 55-58);

ii) estimating total time needed to deliver the second information (a) to the visual or audio interface or (b) to a store local to the visual or audio interface (column 1, lines 58-59); and

iii) using the estimates obtained in step i) or step ii) to determine whether presentation of the first or second information to the user needs to be delayed to achieve a desired synchronism of presentation (column 1, lines 59-62); and

vi) applying delay determined in step iii) to achieved the desired synchronism of presentation (column 1, lines 62-65).

Regarding claim 8, Lundblad teaches:

A method of synchronizing the delivery (a) of first information which is to be presented to the user via a visual display of a multi-modal interface and (b) of second information which is to be presented to the user over an audio interface of the multi-modal interface, the method comprising:

i) estimating total time needed to deliver the first information (a) to the visual display or (b) to a store local to the visual display (column 1, lines 55-58);

ii) estimating total time needed to deliver the second information (a) to the audio interface (b) or to a store local to the audio interface (column 1, lines 58-59); and

iii) if the total time estimated in step i) is more than that estimated in step ii) delaying presentation of the second information to the user sufficiently to enable the first information to be presented to the user before the second information is presented to the user (column 1, lines 58-62; figure 5, elements 510 and 514).

Regarding claim 9, Lundblad teaches:

A method as claimed in claim 7, wherein the delivery of the first information in step (i) is controlled by a server process, delivery of the first information involving delivery of that information to a client of the server process (figure 1, element 102 - content server).

Regarding claim 10, Lundblad teaches:

A method as claimed in claim 7, wherein the delivery of the second information in step (ii) is controlled by a server process, delivery of the second information involving delivery of that information to a client of the server process (figure 1, element 102 - content server).

Regarding claim 16, Lundblad teaches:

A method as claimed in claim 7, wherein the estimate of total time produced in step i) includes a component for the time taken to render the first information on the visual display (column 6, lines 8-11, "presentation delays"; column 7, lines 56-59).

Regarding claim 20, Lundblad teaches:

A system of apparatus for the delivery (a) of first information which is to be presented to the user via a visual display of a multi-modal interface and (b) of second information which is to be presented to the user over a visual or an audio interface of the multi-modal interface, the system including processing means configured to:

estimate total time needed to deliver the first information to the visual display or to a store local to the visual display (column 1, lines 55-58);

estimate total time needed to deliver the second information to the visual or audio interface or to a store local to the visual or audio interface (column 1, lines 58-59); and

to use the estimates thereby obtained to determine whether the presentation to the user of the first or second information to the user needs to be delayed to achieve a desired synchronism of presentation (column 1, lines 59-62), and

to cause any delay determined to be necessary to be applied to achieve the desired synchronism of presentation (column 1, lines 62-65).

Regarding claim 21, Lundblad teaches:

A system of apparatus for the delivery (a) of first information which is to be presented to the user via first output means of a multi-modal interface and (b) of second information which is to be presented to the user via second output means of the multi-modal interface, the system including processing means configured to:

estimate the total time needed to deliver the first information to the first output means or to a store local to the first output means (column 1, lines 55-58);

estimate the total time needed to deliver the second information to second output means or to a store local to the second output means (column 1, lines 58-59); and

to use the estimates thereby obtained to determine whether presentation of the first or second information to the user needs to be delayed to achieve a desired synchronism of presentation (column 1, lines 59-62); and

to cause any delay determined to be necessary to be applied to achieve the desired synchronism of presentation (column 1, lines 62-65).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundblad as applied to claim 1 above, and further in view of Dutta et al., Patent No.: US 6,961,458 B2 (hereinafter Dutta).

Lundblad teaches the limitation of claim 1 for the reasons above.

Lundblad does not explicitly disclose that the output means are tactile reproduction means.

Dutta teaches a data output mean for visually impaired user. Column 6, lines 1-3 teach the output device that generates tactile output like Braille. Dutta further provide the advantage of using tactile to communicate information to the visually impaired user.

It would have been obvious to one of ordinary skill in the art, having the teaching of Lundblad and Dutta before them at the time the invention was made to modify the system of Charlton et al. to include tactile output means as taught by Dutta

One of ordinary skill in the art would have been motivated to make this modification in order to allow a visually impaired user to receive data in a communication system. Dutta teaches that transmitting and receiving information in a

communication system has become culture fixture and that visually impaired user relies on tools like tactile to help them be part of that culture.

7. Claims 11-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundblad as applied to claim 7 above, and further in view of Grove et al. Patent No.: US 6,820,133 B1 (hereinafter Grove).

Regarding claims 11 and 12,

Lundblad teaches the limitation of claim 7 for the reasons above. Lundblad teaches the determination of processing delay includes presentation delay.

Lundblad does not explicitly disclose latency of a communication channel.

Grove teaches measuring of latency of a data transmission from one node to another (Column 15 lines 27-37). Lundblad further teach utilizing the measured latency to estimate the communication time between two devices (column 18, lines 53-62).

Lundblad suggests the utilization of time related to transmission of data in the presentation delay. It would have been obvious to one of ordinary skill in the art, having the teachings of Lundblad and Grove before them at the time the invention was made to modify the system and method of Lundblad to use measured latency for estimation of data transmission time as taught by Grove.

One of ordinary skill in the art would have been motivated to make this modification in order to better estimate the processing delay needed.

Regarding claim 13, Lundblad in view of Grove teach the method and system according to claim 11, as described above.

Grove further teaches that the measurement of latency involves a server process sending a communication to an associated client to elicit a response therefrom, the measurement of latency being derived from the duration of the interval between the sending of the communication and the receipt of the response (column 15, lines 29-32).

Regarding claims 14 and 15,

Lundblad teaches the limitation of claim 7 for the reasons above. Lundblad further teach that knowledge of the quantity of video (first information) and audio (second information) are used to estimate the processing delay (column 5, lines 12-14 and column 6, lines 45-62).

Lundblad does not explicitly disclose the bandwidth information of the communication channel is used to calculate the time required to transmit the information and subsequently used in the estimation of the processing delay.

Grove teaches using bandwidth figures to estimate the communication time between two devices (column 18, lines 53-62).

It would have been obvious to one of ordinary skill in the art, having the teachings of Lundblad and Grove before them at the time the invention was made to modify the system and method of Lundblad to use bandwidth information for estimation of the data transmission time as taught by Grove.

One of ordinary skill in the art would have been motivated to make this modification in order to better estimate the processing delay needed.

Claim 17 is rejected on the same basis as claims 11-12 and 14-15. See the discussions regarding claims 11-12 and 14-15 above for details of this disclosure.

Claim 18 is rejected on the same basis as claims 11 and 12. See the discussions regarding claims 11 and 12 above for details of this disclosure.

Claim 19 is rejected on the same basis as claims 14 and 15. See the discussions regarding claims 14 and 15 above for details of this disclosure.

Response to Arguments

8. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Examiner's Notes: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully

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consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

A handwritten signature in black ink, appearing to read 'Jeffrey PWU', is positioned above the printed name.

JEFFREY PWU
SUPERVISORY PATENT EXAMINER

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yan Chen whose telephone number is (571) 270-1926. The examiner can normally be reached on Monday through Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YC